

GRADE: 12 DATE: 10.08.19

TOPIC: SOLUTIONS WORKSHEET NO.1

1. What are isotonic solutions?

2. Give one example of a Semi Permeable membrane?

3. State Henry’s Law.

4. What are colligative properties?

5. What is the total sum of mole fractions of all the components in a quaternary solution?

6. What is Osmosis?

7. Why are aquatic species more comfortable in cold water in comparison to warm water?

8. State the main reason advantage of molality over molarity as the unit of concentration.

9. What an azeotropic mixtures? Give examples.

10. Give reason when 30ml of ethanol and 30ml of water are mixed the volume of

resulting solution is more than 60 ml.

11. On adding solute having vapour pressure 0.80 atm, vapour pressure reduces to 0.60 atm. Calculate the

mole fraction of the solute.

12. A solution containg 30 gms of non-volatile solute in exactly 90 gms water has a vapour pressure of 21.85 mm of Hg at 250 C. Further 18 gms of water is then added to the solution. The resulting solution has a vapour pressure of 22.15 mm of Hg at 250C. Calculate the molecular weight of the solute.





